MBT

COMPANY PROFILE

www.mbt.vn

CONTENT

General Introduction 04

Vision – Mission – Core Values 06

Certificates 08

Production Technology 10

Quality Control Process 14

High Quality Input Materials 16

Product Lines 18

Partners & Customers 20

“ CONSISTENT QUALITY
BRINGS TRUST

MESSAGE FROM GENARAL DIRECTOR

Dear valued partners, clients and friends.

MBT Electrical Equipment Joint Stock Company would like to thank all our Partners and Customers for helping, supporting and cooperating with our Company since the early days of establishment in 2009.

Started from a small factory with primary equipment, so far MBT has become one of the leading enterprises in Vietnam market in the field of manufacturing electrical equipment and construction of electricity works.

MBT is proud of the business motto "QUALITY BRING TRUST", always at the forefront of research and application of advanced technology in the world in order to improve productivity and quality of products.

MBT understands its mission to provide customers with optimal products in terms of performance, stability and sustainability. Along with that, with a team of high-quality and experienced human resources, MBT is committed to providing our customers and partners with perfect service, the best price, the fastest delivery time and warranty service.

In order to achieve these successes, we really appreciated the trust and support from all of you – our valued partners and customers.

Respectfully yours.

GENARAL DIRECTOR
TRAN VAN NAM

01 GENERAL INTRODUCTION

Total Staff includes 235 employees, of which:

70 OFFICE STAFF

165 TECHNICAL WORKERS

MBT Electrical Equipment.,JSC is a professional manufacture in:

- Designing and manufacturing of single phase and 3-phase transformer types with voltage up to 38kV and capacity up to 31500kVA. Arc furnace transformer and Rectifer transformer...
- AC and DC reactors for industrial equipment such as: AC reactor for arc furnace transformer, input and output reactors for DC invertors, AC reactor for frequency converter, series reactors for LV and HV capacitors (up to 22kV), reactor for starting 3-phase motor...
- Potential transformer (PT) and Current transformer (CT) up to 35kV.
- Automatic Voltage Regulator (AVR) up to 35kV.
- Low and Medium Voltage Panel, Power substation.

In order to make our products with the best quality and compliance with international standards and the economic integration of the world, we has invested synchronous infrastructure, new equipments with high advanced technology and test equipments with high accuracy and reliability from developed countries in the world.

Our products are designed, manufactured and tested comliance to the international Standards: IEC 60076, ANSI ...

Good quality products, professional and attentive service, reliable choice for all customers.

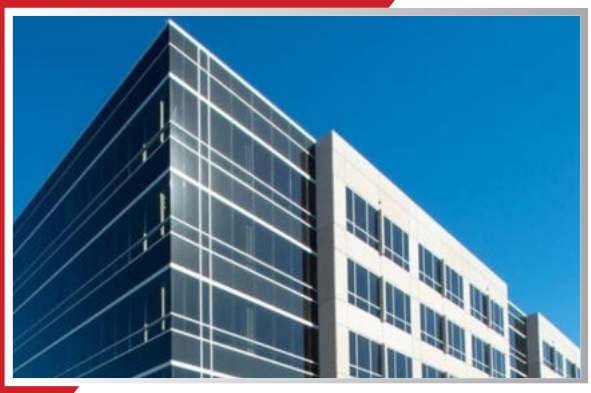
With the advance equipments, professional engineers, skill workers plus the quality management system ISO 9001:2015, MBT Electrical Equipment.,JSC confirms that by the development of our quality products and professional services we will make customer satisfaction and you really get the benefits when using our products.

We always want to have the best co-operation with you in order to contribute to your success with our abilities.

02 VISION - MISSION STRATEGIC PHILOSOPHY

VISION

To become the best electrical equipment manufacturer in Viet Nam and Asia



MISSION

Providing electrical equipment products with optimal quality and perfect service, bringing benefits to customers in particular and society in general.

STRATEGIC PHILOSOPHY

The quality of human resources plays a fundamental role in the development of an enterprise, which is the core to effectively operate the entire system. Therefore, focusing on human resource development is always a pioneering orientation in the development planning of MBT.

Human resource of MBT has high professional qualifications, graduated from leading specialized universities in Vietnam such as University of Technology, Hanoi National University, National Economics University, Trade University, and Hanoi University of Industry...; Many experienced staff in management, engineering and production have studied and worked in developed countries in the world such as Russia, Germany, Finland, China, Singapore...

03 QUALITY CERTIFICATES

BVQA
CERTIFICATE
Awarded to
HA NOI ELECTRIC POWER TRANSFORMER MANUFACTURE JOINT STOCK COMPANY
Seng Cung Industrial Zone, Dong Thap Commune, Dan Phuong District, Hanoi City, Vietnam
ISO 14001:2015
Manufacture and Supply of Transformer; Trading of Electrical Instruments
IAF
PAC

CERTIFICATE
HA NOI ELECTRIC POWER TRANSFORMER MANUFACTURE JOINT STOCK COMPANY
ISO 9001:2015
Production and trading of transformers, electrical equipment supplies

CERTIFIED ISO/IEC 17025 LABORATORY

ISO / IEC 17025: 2005 ACCREDITATION CERTIFICATE

ISO / IEC 17025: 2005 certification confirms that the technical quality of MBT meets the requirements of all specialized international standards for testing and calibration laboratories. All products of MBT are fully tested in standard testing rooms before being shipped, ensuring stable quality and creating absolute peace of mind for customers.

QUALITY MANAGEMENT SYSTEM ISO 9001: 2015

The operation of the whole system is strictly controlled and managed, thereby ensuring the quality of products in all stages from receiving customer requests to design, input materials, assembly, testing, packaging, delivery, and after-sales. All operates under strict procedures and link with each other logically.

CERTIFIED ISO 9001:2015 COMPANY

GIẤY CHỨNG NHẬN PHÙ HỢP TIÊU CHUẨN
CERTIFICATE OF CONFORMITY
MÁY BIẾN ÁP
MBT
CÔNG TY CỔ PHẦN CHẾ TẠO BIẾN THẾ ĐIỆN LỰC HÀ NỘI

ENVIRONMENTAL MANAGEMENT ACCORDING TO ISO 14001

MBT pioneered the application of environmental management system ISO 14001 - 2015. The implementation of this process is a commitment to MBT's responsibility to customers, communities and society. MBT is committed to offering high quality but most environmentally friendly technical products.

STREAMLINED GOVERNANCE MODEL

In the context of increasing factory scale and production capacity, to ensure that customers' requirements are met as well as minimizing unnecessary waste, MBT has applied the model. streamlined management to achieve maximum efficiency in production and business activities. Starting with the application of 5S, which means 5 steps include: Screening, removing unnecessary things, rearranging necessary things so that it is easy to find, easy to see, easy to use - Always keep the working environment clean - Care 3S - Always in the mind of being ready to implement 5S. Along with that is the application of Kaizen, use of employee's creativities to continuously improve, bring effective innovations in production and management.

04 PRODUCTION TECHNOLOGY

Determining Quality is the most important factor to compete, right from the early days of establishment, MBT has focused on investing in modern production technology. Almost all of production machines, testing equipment to important inputs materials are all imported from industrialized G7 countries. At the same time, a team of engineers and skilled workers, well-trained and experienced, are always trained by foreign experts to continuously improve their skills and improve quality.

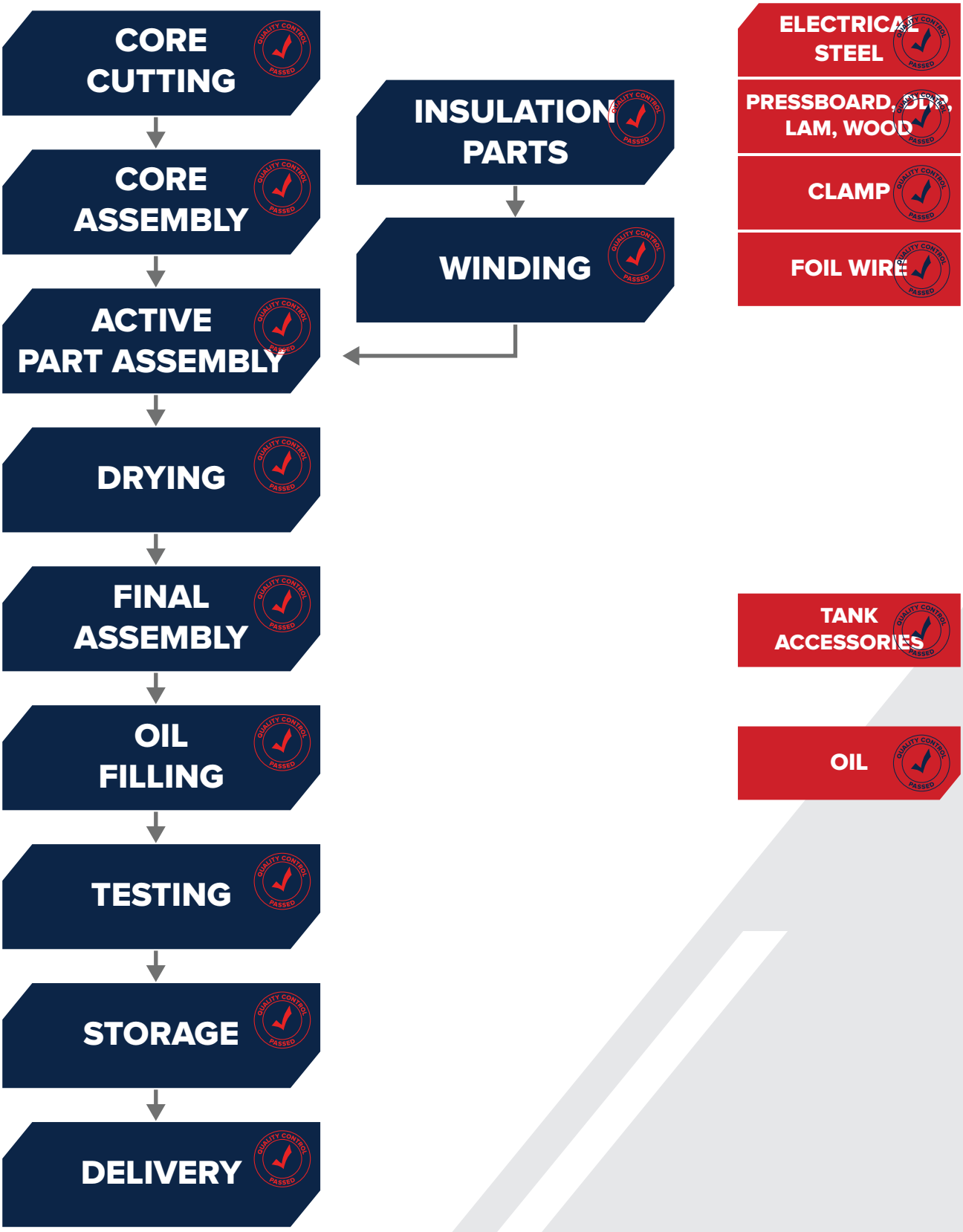
PRODUCTION TECHNOLOGY

TruBend 5170

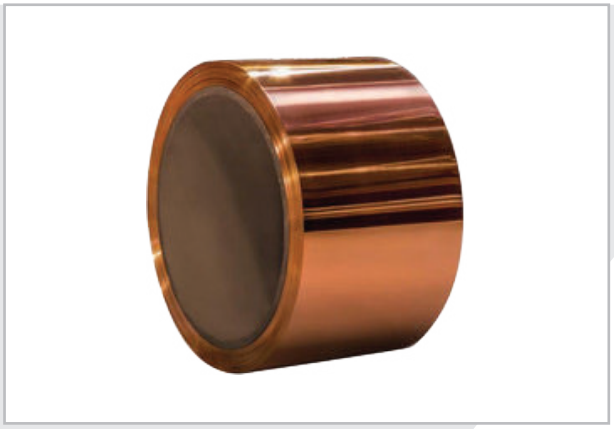
05 QUALITY CONTROL PROCESS

QUALITY MANAGEMENT SYSTEM ISO 9001: 2015

All products of MBT undergo strict quality control procedures at all stages, from input materials to output product testing, to ensure all products meet strict requirements in accordance with international standards


CORE CUTTING
CORE ASSEMBLY
ACTIVE PART ASSEMBLY
DRYING
FINAL ASSEMBLY
OIL FILLING
TESTING
STORAGE
DELIVERY
INSULATION PARTS
WINDING
ELECTRICAL STEEL
PRESSBOARD, ...DER, LAM, WOOD
CLAMP
FOIL WIRE
TANK ACCESSORIES
OIL

06 HIGH QUALITY INPUT MATERIALS



COPPER
(MKM – German, Sofiamed - Bulgari)

COPPER WIRE
(KCT - Korea, Ngohan – Vietnam)

VOLTAGE TAP CHANGER
(Elletromaule – Italia)

ELECTRICAL INSULATION PAPER

RUBBER GASKETS

PLUG-IN PORCELAIN
(Ares – Turkey)

HIGH VOLTAGE PORCELAIN INSULATORS
(Hoang Lien Son – Vietnam)

LOW VOLTAGE PORCELAIN INSULATORS
(Hoang Lien Son – Vietnam)

ELECTRICAL STEEL
(Nippon Steel & sumitomo metal group, JAPAN)

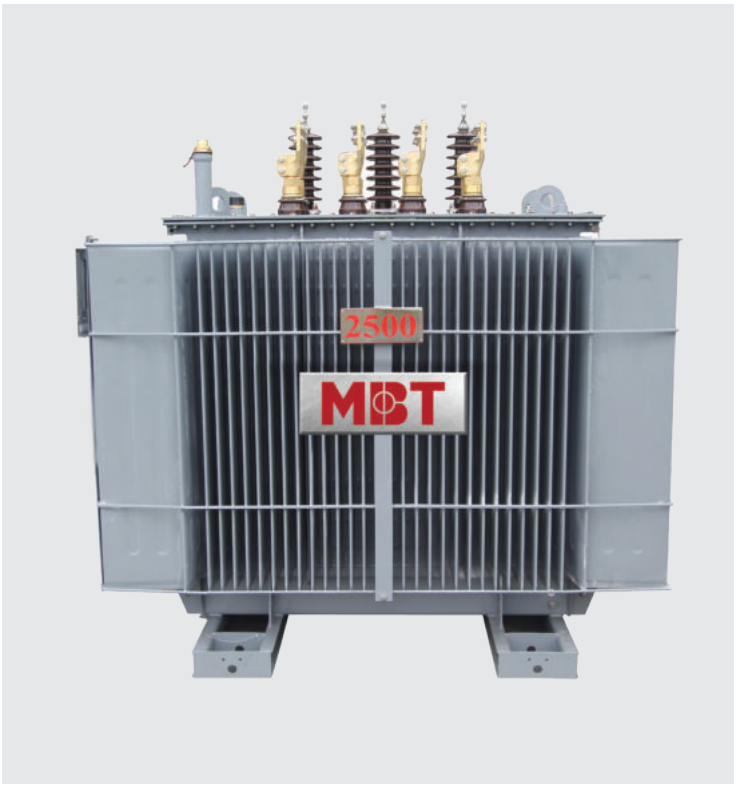
RADIATION FINS

ELECTRICAL INSULATION OIL
(Nynas - Belgium, Cargill - USA, Hyrax - Malaysia, Apar - India, GS – Korea)

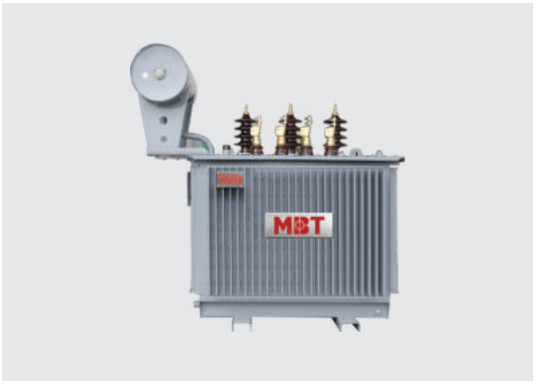
07 PRODUCT LINES

Our MBT transformers are proud to be high quality products, meeting the needs of numerous customers and accompanying the development of our customers and society. MBT transformers are present in many large and small projects across the country from important projects such as hydropower, airports, commercial centers, defense projects.

3-PHASE SEAL TYPE TRANSFORMER



3-PHASE CONVERVATOR TYPE TRANSFORMER



SINGLE PHASE TRANSFORMER

DRY TRANSFORMER

ELECTRIC SWITCHBOARD & TRANSFORMER SUBSTATION

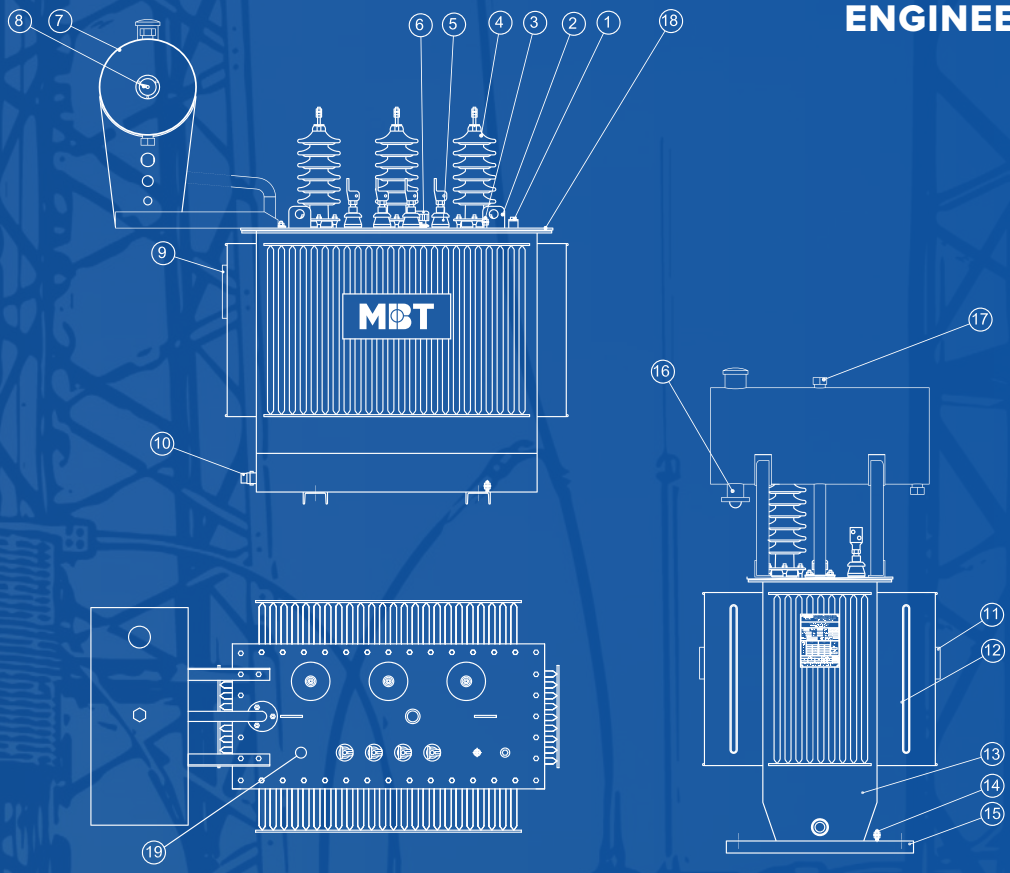
3-PHASE CONVERVATOR TYPE TRANSFORMER

1- Capacity from 50 kVA ÷ 2500 kVA, 35 kV
- Voltage ranger (± 2x2,5%); (± 5%)
- Vector group: Yyn12

Capacity *(kVA)*	Loss *(W)*		No load current *(Io%)*	Minimum impedance *(Uk%)*	Energy efficienci *(E50%)*	Overall dimensions *(mm)*				Weight *(kg)*	
	No load *(Po)*	Load loss *(Pk)*				A	B	C	D	Oil	Total
50	120	715	2	4	98.82	1550	750	1550	520	215	765
75	165	985	2	4	98.92	1600	800	1550	520	225	860
100	205	1250	2	4	98.98	1650	800	1600	520	245	960
160	280	1940	2	4	99.05	1650	850	1700	660	330	1230
180	295	2090	2	4	99,10	1650	900	1700	660	345	1330
250	340	2600	2	4	99.21	1700	950	1800	660	400	1600
320	385	3170	2	4	99.27	1750	1000	1850	660	520	2135
400	433	3820	2	4	99.31	1750	1000	1950	660	600	2490
560	580	4810	2	4	99.37	1800	1050	2000	660	650	2790
630	780	5570	2	4	99.32	1850	1100	2050	820	655	2800
750	845	6540	1.5	5	99.34	1950	1150	2200	820	755	3185
1000	980	8550	1.5	5	99.38	2000	1150	2300	820	845	3720
1250	1115	10690	1	5	99,40	2150	1200	2350	820	925	4250
1600	1305	13680	1	6	99.41	2150	1250	2500	1070	1075	4780
2000	1500	17100	1	6	99.43	2250	1300	2650	1070	1265	6025
2500	1850	21000	1	6	99.44	2300	1400	2750	1070	1350	6385

* Transformers with other capacity, voltage grade and vector group will be manufactured by purchase order.

ENGINEERING DRAWING



NOTE

1. Thermometer pocket
2. Active part lifting hooks
3. Earthing
4. HV Busshing
5. LV Busshing
6. Tap changer knob
7. Conservator
8. Oil level indicator
9. Label
10. Oil discharge valve
11. Logo
12. Radiation fins
13. Tank
14. Earthing
15. Rolling wheel frame
16. Air breather
17. Oil fill cap
18. Cover
19. Oil Presssure relief valve

2- Capacity from 50 kVA ÷ 2500 kVA, 22 kV

- Voltage ranger (± 2x2,5%); (± 5%)
- Vector group: Dyn11

Capacity *(kVA)*	Loss *(W)*		No load current *(Io%)*	Minimum impedance *(Uk%)*	Energy efficienci *(E50%)*	Overall dimensions *(mm)*				Weight *(kg)*	
	No load *(Po)*	Load loss *(Pk)*				A	B	C	D	Oil	Total
50	120	715	2	4	98.82	1450	700	1450	520	165	605
75	165	985	2	4	98.92	1450	750	1450	520	205	765
100	205	1250	2	4	98.98	1500	750	1450	520	255	880
160	280	1940	2	4	99.05	1550	800	1550	660	280	1100
180	295	2090	2	4	99,10	1550	900	1550	660	290	1165
250	340	2600	2	4	99.21	1600	900	1650	660	350	1465
320	385	3170	2	4	99.27	1650	950	1750	660	370	1620
400	433	3820	2	4	99.31	1700	1000	1750	660	430	1925
560	580	4810	2	4	99.37	1750	1050	1850	660	495	2320
630	780	5570	2	4	99.32	1750	1050	1900	820	510	2340
750	845	6540	1.5	5	99.34	1800	1050	2050	820	550	2525
1000	980	8550	1.5	5	99.38	1950	1050	2150	820	675	3110
1250	1115	10690	1	5	99,40	2000	1150	2200	820	755	3530
1600	1305	13680	1	6	99.41	2050	1200	2350	1070	965	4560
2000	1500	17100	1	6	99.43	2150	1300	2400	1070	1110	5275
2500	1850	21000	1	6	99.44	2300	1350	2600	1070	1200	5735

* Transformers with other capacity, voltage grade and vector group will be manufactured by purchase order.

3- Capacity from 50 kVA ÷ 2500 kVA, 10 - 22 kV
- Voltage ranger (± 2x2,5%); (± 5%)
- Vector group: DDyn11

Capacity *(kVA)*	Loss *(W)*		No load current *(Io%)*	Minimum impedance *(Uk%)*	Energy efficienci *(E50%)*	Overall dimensions *(mm)*				Weight *(kg)*	
	No load *(Po)*	Load loss *(Pk)*				A	B	C	D	Oil	Total
50	120	715	2	4	98.82	1500	700	1500	520	170	645
75	165	985	2	4	98.92	1500	750	1500	520	210	815
100	205	1250	2	4	98.98	1550	750	1500	520	260	940
160	280	1940	2	4	99.05	1600	800	1600	660	290	1175
180	295	2090	2	4	99,10	1600	900	1600	660	300	1245
250	340	2600	2	4	99.21	1650	900	1700	660	365	1565
320	385	3170	2	4	99.27	1700	950	1800	660	380	1730
400	433	3820	2	4	99.31	1750	1000	1800	660	445	2050
560	580	4810	2	4	99.37	1800	1050	1900	660	510	2470
630	780	5570	2	4	99.32	1800	1050	1950	820	525	2495
750	845	6540	1.5	5	99.34	1850	1050	2100	820	570	2695
1000	980	8550	1.5	5	99.38	2000	1050	2200	820	730	3330
1250	1115	10690	1	5	99,40	2050	1150	2250	820	820	2780
1600	1305	13680	1	6	99.41	2100	1200	2400	1070	1040	4885
2000	1500	17100	1	6	99.43	2200	1300	2450	1070	1195	5645
2500	1850	21000	1	6	99.44	2350	1350	2650	1070	1295	6135

4- Capacity from 50 kVA ÷ 2500 kVA, 35 - 22 kV
- Voltage ranger (± 2x2,5%); (± 5%)
- Vector group: YDyn12-11

Capacity *(kVA)*	Loss *(W)*		No load current *(Io%)*	Minimum impedance *(Uk%)*	Energy efficienci *(E50%)*	Overall dimensions *(mm)*				Weight *(kg)*	
	No load *(Po)*	Load loss *(Pk)*				A	B	C	D	Oil	Total
50	120	715	2	4	98.82	1600	750	1600	520	225	810
75	165	985	2	4	98.92	1650	800	1600	520	235	915
100	205	1250	2	4	98.98	1700	800	1650	520	255	1020
160	280	1940	2	4	99.05	1700	850	1750	660	340	1300
180	295	2090	2	4	99,10	1700	900	1750	660	360	1410
250	340	2600	2	4	99.21	1750	950	1850	660	410	1690
320	385	3170	2	4	99.27	1800	1000	1900	660	535	2260
400	433	3820	2	4	99.31	1800	1000	2000	660	620	2640
560	580	4810	2	4	99.37	1850	1050	2050	660	670	2955
630	780	5570	2	4	99.32	1900	1100	2100	820	675	2970
750	845	6540	1.5	5	99.34	2000	1150	2250	820	775	3375
1000	980	8550	1.5	5	99.38	2050	1150	2350	820	870	3945
1250	1115	10690	1	5	99,40	2200	1200	2400	820	955	4500
1600	1305	13680	1	6	99.41	2200	1250	2550	1070	1105	5065
2000	1500	17100	1	6	99.43	2300	1300	2700	1070	1300	6390
2500	1850	21000	1	6	99.44	2350	1400	2800	1070	1390	6770

* Transformers with other capacity, voltage grade and vector group will be manufactured by purchase order.

5- Capacity from 50 kVA ÷ 2500 kVA, 10 kV

- Voltage ranger (± 2x2,5%); (± 5%)
- Vector group: Dyn11

Capacity *(kVA)*	Loss *(W)*		No load current *(Io%)*	Minimum impedance *(Uk%)*	Energy efficienci *(E50%)*	Overall dimensions *(mm)*				Weight *(kg)*	
	No load *(Po)*	Load loss *(Pk)*				A	B	C	D	Oil	Total
50	120	715	2	4	98.82	1450	700	1450	520	165	605
75	165	985	2	4	98.92	1450	750	1450	520	205	765
100	205	1250	2	4	98.98	1500	750	1450	520	255	880
160	280	1940	2	4	99.05	1550	800	1550	660	280	1100
180	295	2090	2	4	99,10	1550	900	1550	660	290	1165
250	340	2600	2	4	99.21	1600	900	1650	660	350	1465
320	385	3170	2	4	99.27	1650	950	1750	660	370	1620
400	433	3820	2	4	99.31	1700	1000	1750	660	430	1925
560	580	4810	2	4	99.37	1750	1050	1850	660	495	2320
630	780	5570	2	4	99.32	1750	1050	1900	820	510	2340
750	845	6540	1.5	5	99.34	1800	1050	2050	820	550	2525
1000	980	8550	1.5	5	99.38	1950	1050	2150	820	675	3110
1250	1115	10690	1	5	99,40	2000	1150	2200	820	755	3530
1600	1305	13680	1	6	99.41	2050	1200	2350	1070	965	4560
2000	1500	17100	1	6	99.43	2150	1300	2400	1070	1110	5275
2500	1850	21000	1	6	99.44	2300	1350	2600	1070	1200	5735

* Transformers with other capacity, voltage grade and vector group will be manufactured by purchase order.

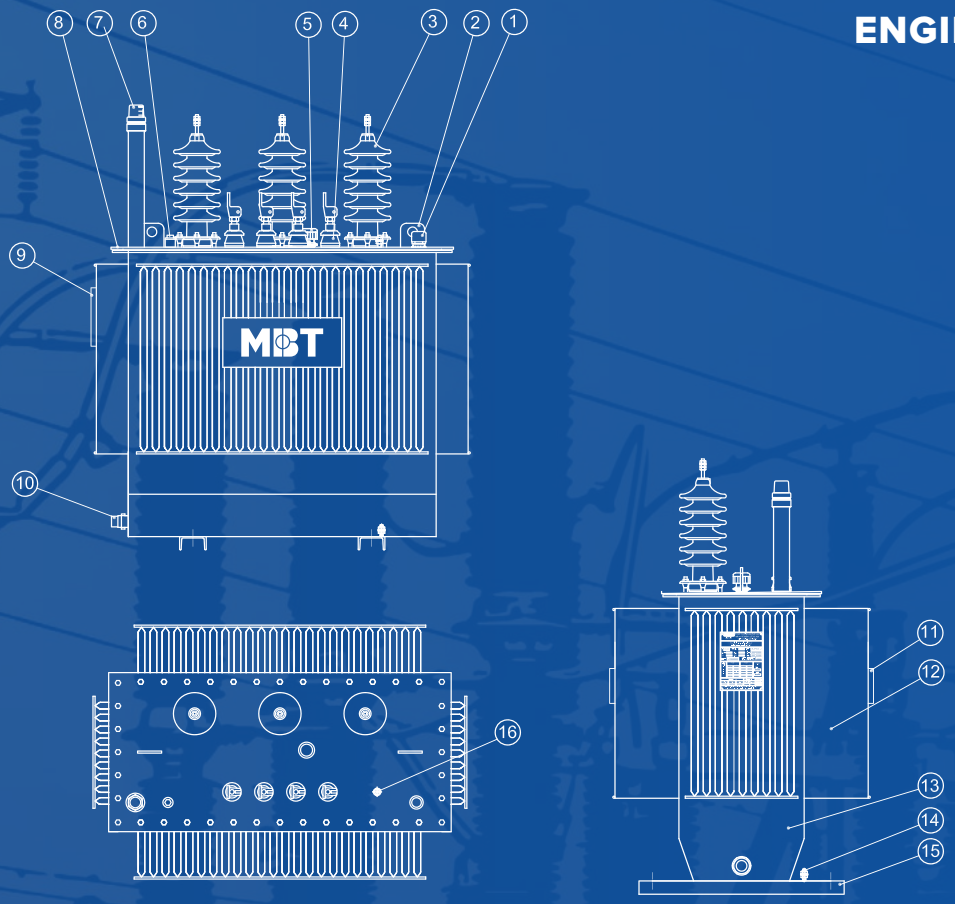
3-PHASE SEAL TYPE TRANSFORMER

1- Capacity from 50 kVA ÷ 2500 kVA, 35 kV
- Voltage ranger (± 2x2,5%); (± 5%)
- Vector group: Yyn12

Capacity *(kVA)*	Loss *(W)*		No load current *(Io%)*	Minimum impedance *(Uk%)*	Energy efficienci *(E50%)*	Overall dimensions *(mm)*				Weight *(kg)*	
	No load *(Po)*	Load loss *(Pk)*				A	B	C	D	Oil	Total
50	120	715	2	4	98.82	1100	800	1400	520	215	765
75	165	985	2	4	98.92	1100	950	1450	520	225	860
100	205	1250	2	4	98.98	1150	950	1450	520	245	960
160	280	1940	2	4	99.05	1300	950	1450	660	330	1230
180	295	2090	2	4	99,10	1300	1000	1450	660	345	1330
250	340	2600	2	4	99.21	1450	1050	1550	660	400	1600
320	385	3170	2	4	99.27	1450	1050	1600	660	520	2135
400	433	3820	2	4	99.31	1450	1100	1650	660	600	2490
560	580	4810	2	4	99.37	1650	1100	1700	660	650	2790
630	780	5570	2	4	99.32	1650	1150	1750	820	655	2800
750	845	6540	1.5	5	99.34	1750	1150	1850	820	755	3185
1000	980	8550	1.5	5	99.38	1750	1150	1900	820	845	3720
1250	1115	10690	1	5	99.40	1850	1250	1900	820	925	4250
1600	1305	13680	1	6	99.41	1950	1300	2050	820	1075	4780
2000	1500	17100	1	6	99.43	2050	1400	2050	1070	1265	6025
2500	1850	21000	1	6	99.44	2150	1400	2200	1070	1350	6385

* Transformers with other capacity, voltage grade and vector group will be manufactured by purchase order.

ENGINEERING DRAWING



NOTE

1. Oil Presssure relief valve
2. Active part lifting hooks
3. HV Busshing
4. LV Busshing
5. Tap changer knob
6. Thermometer pocket
7. Oil level indicator
8. Cover
9. Label
10. Oil discharge valve
11. Logo
12. Radiation fins
13. Tank
14. Earthing
15. Rolling wheel frame
16. Earthing

2- Capacity from 50 kVA ÷ 2500 kVA, 22 kV

- Voltage ranger (± 2x2,5%); (± 5%)
- Vector group: Dyn11

Capacity *(kVA)*	Loss *(W)*		No load current *(Io%)*	Minimum impedance *(Uk%)*	Energy efficienci *(E50%)*	Overall dimensions *(mm)*				Weight *(kg)*	
	No load *(Po)*	Load loss *(Pk)*				A	B	C	D	Oil	Total
50	120	715	2	4	98.82	1100	750	1250	520	165	605
75	165	985	2	4	98.92	1100	800	1250	520	205	765
100	205	1250	2	4	98.98	1150	950	1250	520	255	880
160	280	1940	2	4	99.05	1250	950	1300	660	280	1100
180	295	2090	2	4	99,10	1250	1000	1300	660	290	1165
250	340	2600	2	4	99.21	1350	1050	1400	660	350	1465
320	385	3170	2	4	99.27	1350	1050	1450	660	370	1620
400	433	3820	2	4	99.31	1450	1100	1500	660	430	1925
560	580	4810	2	4	99.37	1650	1100	1550	660	495	2320
630	780	5570	2	4	99.32	1650	1100	1600	820	510	2340
750	845	6540	1.5	5	99.34	1650	1100	1700	820	550	2525
1000	980	8550	1.5	5	99.38	1700	1150	1750	820	675	3110
1250	1115	10690	1	5	99,40	1750	1200	1750	820	755	3530
1600	1305	13680	1	6	99.41	1850	1250	1850	1070	965	4560
2000	1500	17100	1	6	99.43	1950	1350	1900	1070	1110	5275
2500	1850	21000	1	6	99.44	2050	1400	2050	1070	1200	5735

* Transformers with other capacity, voltage grade and vector group will be manufactured by purchase order.

3- Capacity from 50 kVA ÷ 2500 kVA, 10 - 22 kV
- Voltage ranger (± 2x2,5%); (± 5%)
- Vector group: DDyn11

Capacity *(kVA)*	Loss *(W)*		No load current *(Io%)*	Minimum impedance *(Uk%)*	Energy efficienci *(E50%)*	Overall dimensions *(mm)*				Weight *(kg)*	
	No load *(Po)*	Load loss *(Pk)*				A	B	C	D	Oil	Total
50	120	715	2	4	98.82	1150	750	1300	520	170	645
75	165	985	2	4	98.92	1150	800	1300	520	210	815
100	205	1250	2	4	98.98	1200	950	1300	520	260	940
160	280	1940	2	4	99.05	1300	950	1350	660	290	1175
180	295	2090	2	4	99,10	1400	1000	1350	660	300	1245
250	340	2600	2	4	99.21	1400	1050	1450	660	365	1565
320	385	3170	2	4	99.27	1400	1050	1500	660	380	1730
400	433	3820	2	4	99.31	1500	1100	1550	660	445	2050
560	580	4810	2	4	99.37	1700	1100	1600	660	510	2470
630	780	5570	2	4	99.32	1700	1100	1650	820	525	2495
750	845	6540	1.5	5	99.34	1700	1100	1750	820	570	2695
1000	980	8550	1.5	5	99.38	1750	1150	1800	820	730	3330
1250	1115	10690	1	5	99,40	1800	1200	1800	820	820	2780
1600	1305	13680	1	6	99.41	1900	1250	1900	1070	1040	4885
2000	1500	17100	1	6	99.43	2000	1350	1950	1070	1195	5645
2500	1850	21000	1	6	99.44	2100	1400	2100	1070	1295	6135

4- Capacity from 50 kVA ÷ 2500 kVA, 35 - 22 kV
- Voltage ranger (± 2x2,5%); (± 5%)
- Vector group: YDyn12-11

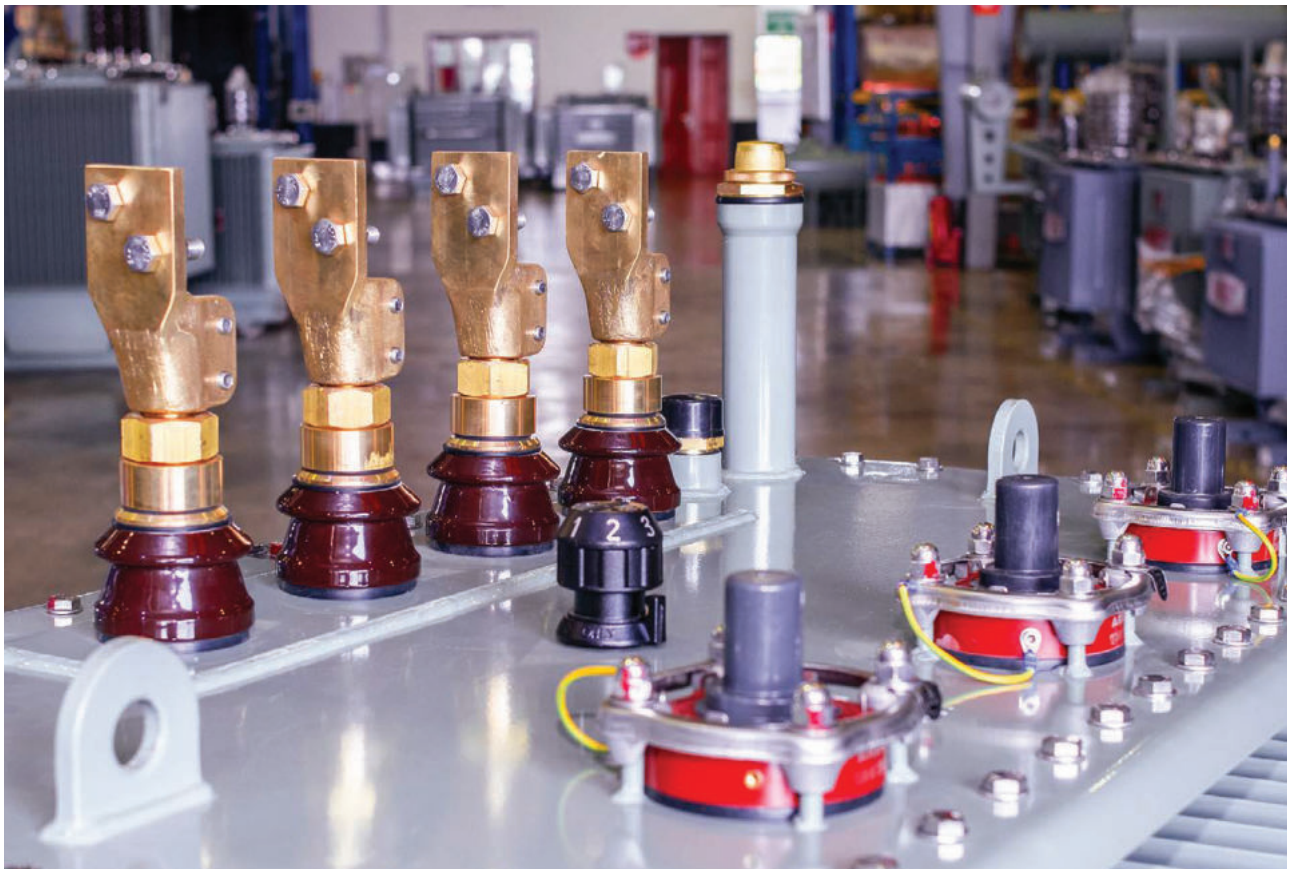
Capacity *(kVA)*	Loss *(W)*		No load current *(Io%)*	Minimum impedance *(Uk%)*	Energy efficienci *(E50%)*	Overall dimensions *(mm)*				Weight *(kg)*	
	No load *(Po)*	Load loss *(Pk)*				A	B	C	D	Oil	Total
50	120	715	2	4	98.82	1150	800	1450	520	225	810
75	165	985	2	4	98.92	1150	950	1500	520	235	915
100	205	1250	2	4	98.98	1200	950	1500	520	255	1020
160	280	1940	2	4	99.05	1350	950	1500	660	340	1300
180	295	2090	2	4	99,10	1350	1000	1500	660	360	1410
250	340	2600	2	4	99.21	1500	1050	1600	660	410	1690
320	385	3170	2	4	99.27	1500	1050	1650	660	535	2260
400	433	3820	2	4	99.31	1500	1100	1700	660	620	2640
560	580	4810	2	4	99.37	1700	1100	1750	660	670	2955
630	780	5570	2	4	99.32	1700	1150	1800	820	675	2970
750	845	6540	1.5	5	99.34	1800	1150	1900	820	775	3375
1000	980	8550	1.5	5	99.38	1800	1150	1950	820	870	3945
1250	1115	10690	1	5	99,40	1900	1250	1950	820	955	4500
1600	1305	13680	1	6	99.41	2000	1300	2100	1070	1105	5065
2000	1500	17100	1	6	99.43	2100	1400	2100	1070	1300	6390
2500	1850	21000	1	6	99.44	2200	1400	2250	1070	1390	6770

* Transformers with other capacity, voltage grade and vector group will be manufactured by purchase order.

5- Capacity from 50 kVA ÷ 2500 kVA, 10 kV
- Voltage ranger (± 2x2,5%); (± 5%)
- Vector group: Dyn11

Capacity *(kVA)*	Loss *(W)*		No load current *(Io%)*	Minimum impedance *(Uk%)*	Energy efficienci *(E50%)*	Overall dimensions *(mm)*				Weight *(kg)*	
	No load *(Po)*	Load loss *(Pk)*				A	B	C	D	Oil	Total
50	120	715	2	4	98.82	1100	750	1250	520	165	605
75	165	985	2	4	98.92	1100	800	1250	520	205	765
100	205	1250	2	4	98.98	1150	950	1250	520	255	880
160	280	1940	2	4	99.05	1250	950	1300	660	280	1100
180	295	2090	2	4	99,10	1250	1000	1300	660	290	1165
250	340	2600	2	4	99.21	1350	1050	1400	660	350	1465
320	385	3170	2	4	99.27	1350	1050	1450	660	370	1620
400	433	3820	2	4	99.31	1450	1100	1500	660	430	1925
560	580	4810	2	4	99.37	1650	1100	1550	660	495	2320
630	780	5570	2	4	99.32	1650	1100	1600	820	510	2340
750	845	6540	1.5	5	99.34	1650	1100	1700	820	550	2525
1000	980	8550	1.5	5	99.38	1700	1150	1750	820	675	3110
1250	1115	10690	1	5	99,40	1750	1200	1750	820	755	3530
1600	1305	13680	1	6	99.41	1850	1250	1850	1070	965	4560
2000	1500	17100	1	6	99.43	1950	1350	1900	1070	1110	5275
2500	1850	21000	1	6	99.44	2050	1400	2050	1070	1200	5735

* Transformers with other capacity, voltage grade and vector group will be manufactured by purchase order.

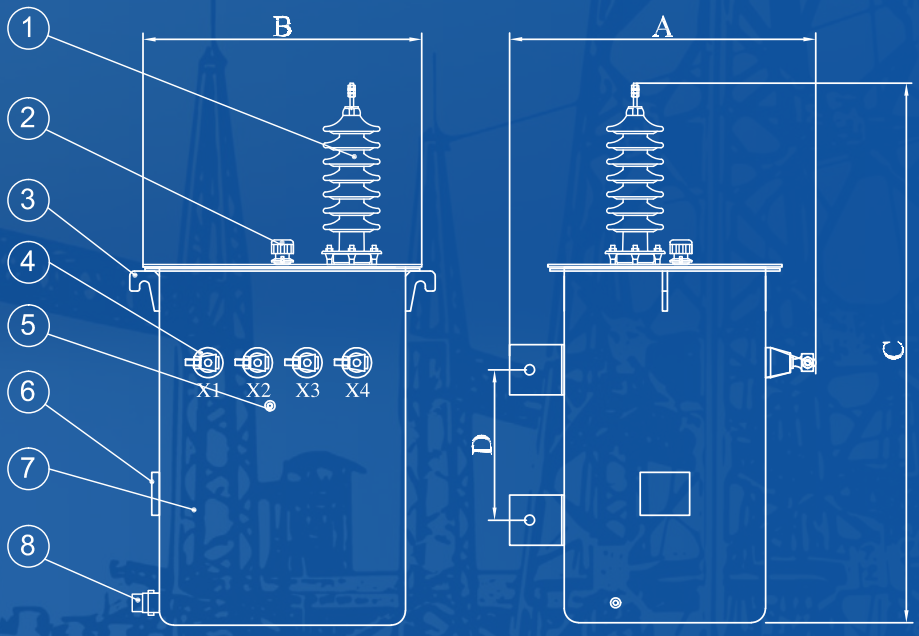


SINGLE PHASE TRANSFORMER

Công suất (kVA)	Cấp điện áp (kV)	Tổ đấu dây	Tiêu chuẩn	Po (w)	Pk75 (w)	Uk75 nhỏ nhất (%)	Điện áp chịu đựng xung (1,2/50ms) cuộn cao thế	Điện áp chịu đựng tần số công nghiệp (kV)
25	12,7/0,23kV	I/2I0	QĐ62	≤67	≤333	2÷2.4	125	50
50	12,7/0,23kV	I/2I0	QĐ62	≤108	≤570	2÷2.4	125	50
37,5	12,7/0,23kV	I/2I0	QĐ62	≤92	≤420	2÷2.4	125	50
15	22/2x0,23kV	I/2I0	QĐ62	≤52	≤213	2±10%	125	50
31.5	22/2x0,23kV	I/2I0	QĐ62	≤80	≤378	2±10%	125	50
25	22/2x0,23kV	I/2I0	QĐ62	≤67	≤333	2÷2.4	125	50
50	22/2x0,23kV	I/2I0	QĐ62	≤108	≤570	2±10%	125	50
37.5	22/2x0,23kV	I/2I0	QĐ62	≤92	≤420	2÷2.4	125	50
50	35(22)/2x0.23	I/2I0	QĐ62	≤108	≤570	2÷2.4	190	80

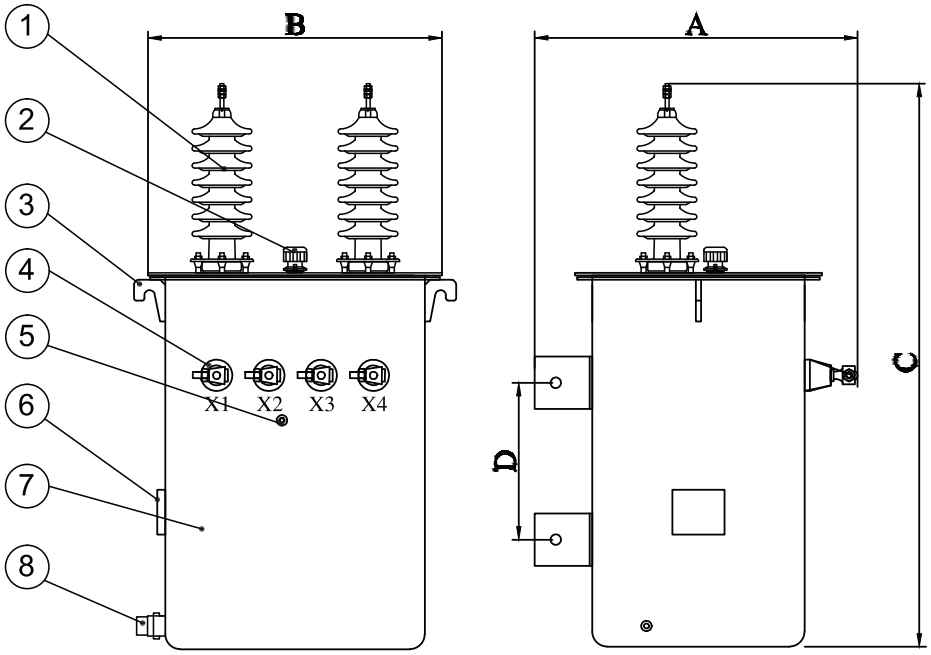
* Transformers with other capacity, voltage grade and vector group will be manufactured by purchase order.

ENGINEERING DRAWING



NOTE

1. HV Busshing
2. Tap changer knob
3. Lifting lugs
4. LV Busshing
5. Earthing
6. Label
7. Tank
8. Oil discharge valve



NOTE

1. HV Busshing
2. Tap changer knob
3. Lifting lugs
4. LV Busshing
5. Earthing
6. Label
7. Tank
8. Oil discharge valve

* Transformers with other capacity, voltage grade and vector group will be manufactured by purchase order.

08 PARTNERS & CUSTOMERS

At MBT, we always treasure every opportunity to cooperate and serve our customers. With a solid foundation of technology and experience, we are confident to bring our partners and customers the best quality products, worthy of being your reliable companion on the road of integration and development.

“ Consistent quality is our way of earning customer’s trust.

EVNNPC
TỔNG CÔNG TY ĐIỆN LỰC MIỀN BẮC

EVNCPC
TỔNG CÔNG TY ĐIỆN LỰC MIỀN TRUNG

EVNSPC
TỔNG CÔNG TY ĐIỆN LỰC MIỀN NAM

케이에프이 (주)
Kfe Vina Co., Ltd

EVNHANOI

JOINT STOCK EXT CO

AMY
Build today, last forever

LAM SƠN Co., Ltd

LS

OMRON
AUTOMATION & SAFETY

HYUNDAI

Schneider Electric

MBT ELECTRICAL EQUIPMENT JOINT STOCK COMPANY

Song Cung Industrial zone - Dong Thap Commune - Dan Phuong Dist - Ha Noi
+84-24 3765 3510 +84-24 3765 3511 +84 91 300 65 38
info@mbt.vn www.vietnamtransformer.com